

STUDIES IN THE EUPATORIEAE (ASTERACEAE). LXXV.

A NEW GENUS, CRONQUISTIANTHUS.

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One of the most important elements of the Eupatorieae in the Andean Region is a complex of rather woody species with nearly smooth corolla lobes, plain styles, and well-developed anther appendages. Many of the species have distinctive pale pubescence on the underside of their leaves. One genus related to the complex, Lourteigia, has been described previously (King & H. Robinson, 1971) having achenes greatly constricted under the pappus, having 20 or ca. 40 flowers per head and having dense clusters of hairs on the outer surface of the corolla lobes. A second genus of the complex, Cronquistianthus, is described here on the basis of 13 species that lack the constriction under the pappus, have 8-18 flowers per head and have only glands or scattered hairs on the outer surface of the corolla lobes. A marked characteristic of the new genus is the usually stopper-shaped asymmetrical carpopodium set off by numerous thin-walled easily collapsing wedge-shaped cells. None of the other related genera have such distinctly delimited carpopodia.

There are some other features of the new genus that are notable. The glands on the corolla are more like those of Ophryosporus and Helogyne in lacking much enlarged apical cells. The enlarged tips of the style branches of some species are also reminiscent of Ophryosporus. Ophryosporus is totally distinct by the small anther appendages and Helogyne differs by its densely glanduliferous achenes and very broad style branches. The involucre of some species of Cronquistianthus, especially C. chamaedri-folius, have strongly imbricated phyllaries and resemble those of Chromolaena. The latter genus has a totally different type of carpopodium with straight sides and an outer sheath of cells while the typical element has papillose corolla lobes and a distinctive form of anther collar. One species of Cronquistianthus, C. organoides, has scattered hairs inside of the corolla, a feature not found in any other species of the genus, even the closely related C. niveus. A feature that does seem consistent throughout

Cronquistianthus is the form of the pappus setae which taper to a narrow rather smooth tip.

In naming the new genus we honor again Dr. Arthur Cronquist of the New York Botanical Garden whose philosophical guidance and objectivity have been particularly welcome to the authors.

Cronquistianthus R.M.King & H.Robinson, genus novum Asteracearum (Eupatorieae). Plantae frutescentes erectae pauci- vel multi-ramosae. Caules teretes, glabrescentes; ramulis puberulis. Folia opposita breviter vel longe petiolata, laminis linearibus, lanceolatis vel ovatis acutis utrinque pubescentibus subtus interdum dense albotomentosis, margine integris vel serratis. Inflorescentiae dense corymbosae, capitulis subsessilibus saepe in glomerulis congestis. Involucris squamae imbricatae valde inaequilongae tri-quinqueseriatae, 12-25, obtusae; receptacula plana glabra. Flores 8-18 in capitulo; corollae tubulares vel anguste infundibulares 5-lobatae, lobis aequilateraliter triangularibus vel longioribus laevibus extus glanduliferis vel breviter setiferis, glandibus vix capitatis; filamenta antherarum alte inserta, in parte superiore angusta, cellulis quadratis vel elongatis, parietibus transverse annulatis, cellulis exothecialibus subquadratis, appendicibus longioribus quam latis interdum retusis; styli inferne non nodulosi glabri, appendicibus breviter papillosis ad apicem linearibus vel abrupte dilatatis; achaenia prismatica plerumque 5-costata pauca vel multo setifera; carpodia distincta subobturaculiformia valde inaequalia, cellulis parvis subquadratis vel rotundatis multi-seriatis, parietibus aliquantum incrassatis; pappus setiformis uniseriatus, setis ca. 30-35 contiguas ad apicem sensim angustioribus, cellulis apicalibus acutis.

Species typica: Eupatorium niveum H. B. K.

Our studies of the genus indicate that it contains the following 13 species.

Cronquistianthus chamaedrifolius (H.B.K.) R.M.King & H.Robinson, comb. nov. Eupatorium chamaedrifolium H.B.K., Nov. Gen. et Sp. 4: 88-89. ed. fol. 1818. Ecuador, Peru.

Cronquistianthus chotensis (Hieron.) R.M.King & H. Robinson, comb. nov. Eupatorium chotense Hieron. Engl. Bot. Jahrb. 36: 466. 1905. Peru.

Cronquistianthus desmophyllus (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium desmophyllum B.L.Robinson, Contr. Gray Herb. n.s. 73: 9. 1924. Peru.

Cronquistianthus glomeratus (A.P.Decandolle) R.M.King & H.Robinson, comb. nov. Eupatorium glomeratum A.P.Decandolle, Prodr. 5: 154. 1836. Peru.

Cronquistianthus kalenbornianus (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium kalenbornianum B.L.Robinson, Contr. Gray Herb. n.s. 61: 8. 1920. Peru.

Cronquistianthus lavandulaefolius (A.P.Decandolle) R.M.King & H.Robinson, comb. nov. Eupatorium lavandulaefolium A.P.Decandolle, Prodr. 5: 154. 1836. Peru.

Cronquistianthus leucophyllus (H.B.K.) R.M.King & H. Robinson, comb. nov. Eupatorium leucophyllum H.B.K., Nov. Gen. et Sp. 4: 90. ed. fol. 1818. Peru.

Cronquistianthus niveus (H.B.K.) R.M.King & H. Robins. comb. nov. Eupatorium niveum H.B.K., Nov. Gen. et Sp. 4: 90. ed. fol. 1818. Colombia, Ecuador.

Cronquistianthus organoides (H.B.K.) R.M.King & H. Robinson, comb. nov. Eupatorium organoides H.B.K., Nov. Gen. et Sp. 4: 89. ed. fol. 1818. Colombia, Ecuador.

Cronquistianthus pseudorganoides (Hieron.) R.M.King & H.Robinson, comb. nov. Eupatorium pseudorganoides Hieron., Engl. Bot. Jahrb. 29: 10. 1900. Ecuador.

Cronquistianthus rugosus (H.B.K.) R.M.King & H.Robinson, comb. nov. Eupatorium rugosum H.B.K., Nov. Gen. et Sp. 4: 89. ed. fol. 1818. Colombia, Ecuador.

Cronquistianthus urubambensis (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium urubambense B.L.Robinson, Contr. Gray Herb. n.s. 60: 58. 1919. Peru.

Cronquistianthus volkensis (Hieron.) R.M.King & H. Robinson, comb. nov. Eupatorium volkensis Hieron.,

Engl. Bot. Jahrb. 40: 370. 1908. Peru.

#### Reference

King, R.M. & H. Robinson. 1971. Studies in the Eupatorieae (Compositae). XXXV. A new genus, Lourteigia. Phytologia 21:28-30.

#### Acknowledgement

This study was supported in part by the National Science Foundation Grant GB-20502 A #1 to the senior author.